# Saket Raj

 ♦ Bengaluru, Karnataka, India
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#### Education

#### B.N.M Institute of Technology

Dec 2021 - Present

**Degree**: Bachelor of Engineering (B.E.)

**Branch**: Electronics and Communication Engineering

GPA: 8.25

## Experience

### System Analyst

Sept 2023 - Nov 2023

Senguire Analytics Pvt. Ltd.

- Optimised system performance by reducing memory usage using Linux profiling tools like htop.
- Analysed real-time traffic patterns for a Camera Traffic Generator project, improving efficiency.

## **Projects**

#### Shoplifting Detection using Machine Learning

Nov 2024 - Mar 2025

- Engineered a real-time shoplifting detection system using YOLOv8 for human detection and pose estimation
  to track body movement across surveillance footage. Designed and trained an XGBoost classifier on pose
  keypoints to detect suspicious behaviors such as object concealment, erratic motion, and shelf interactions.
  Integrated a live alert mechanism that captures snapshots and sends email notifications upon detecting
  shoplifting activity.
- o Tools Used: Python, YOLOv8, OpenCV, Pose Estimation, XGBoost, Jupyter Notebook, Git.

#### Camera Traffic Generator

Nov 2023

- Developed a React-based UI for an AI-driven defect detection system on conveyor belts. Integrated camera interfaces for real-time traffic management and analytics.
- o Tools Used: Git, GitHub, Linux, React, OpenCV, JSON.

### Skills

Programming Languages: C, Java, Python, JavaScript

Database and Tools: MySQL, Git, GitHub, Linux

Frameworks and Technologies: HTML, CSS, REST API Development (Flask, Spring Boot), AWS (EC2, RDS, Lambda), MVC Architecture, OpenCV, YOLO

**Software Development Concepts:** Data Structures and Algorithms (DSA), Object-Oriented Programming (OOPs), DevOps

## Courses and Certifications

- Software Engineering (Infosys Springboard)
- o Developing and Deploying Software in the Cloud (IBM SkillBuild)

### **Extracurricular Activities**

- Committee Member in Cycle Street Event (2024)
- Member of TedxBNMIT
- o Member of NSS